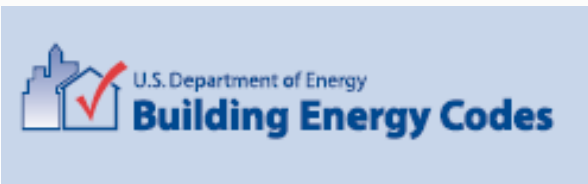


Daylighting



Daylighting Defined

- Daylighting uses natural light to illuminate buildings. Rather than relying on banks of electric lights, daylighting brings indirect sunlight deep into a building, connecting people to the outdoors while providing comfortable, low-cost illumination.



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Daylighting is Especially Well Suited to Schools

- Attendance
- Academic performance
- Energy savings
- Improved health
- Less substitute teacher need
- Better light
- Smaller HVAC systems
- Connection to nature



Key Components and Terms

- Roof Monitors
- Clerestories
- Lightshelves
- Controls
- Lightwell
- Surface color
- Visible Light Transmission
- Top lighting

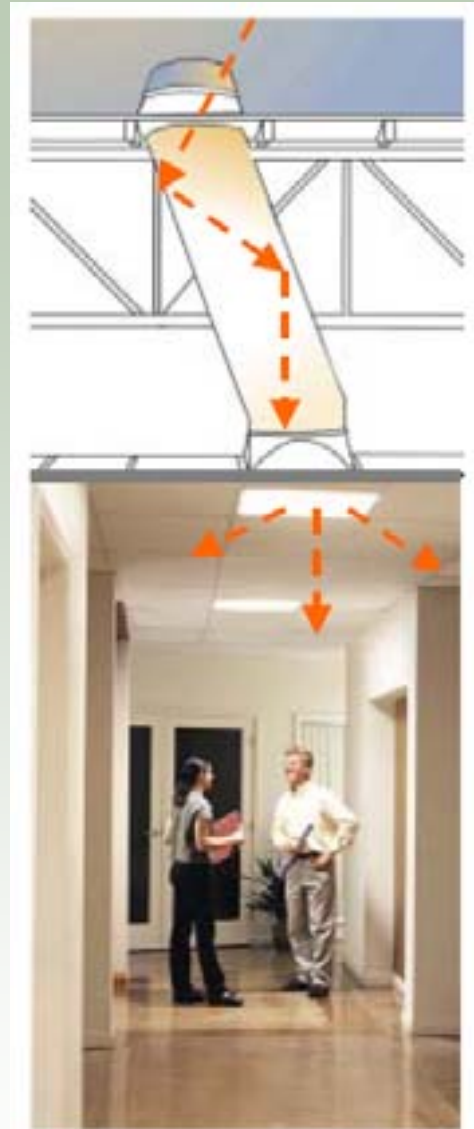
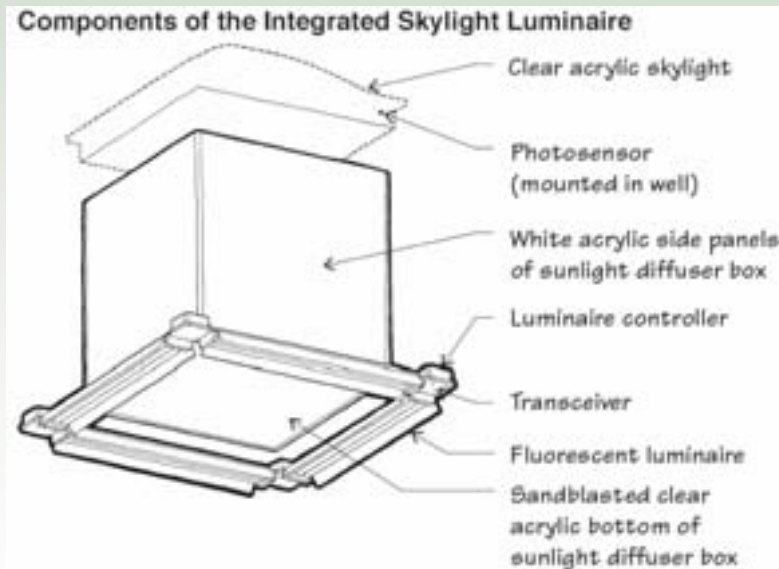


Six Major Keys to Daylight design

1. Prevent direct sunlight penetration
2. Provide gentle uniform light
3. Avoid glare
4. Control
5. Electric lights work with the daylight
6. Plan the layout of interior spaces

Skylights and Solar Tubes

- Specific applications
- Gets light far into a building
- Saves lighting energy



Resources

- US Department of Energy: www.eere.energy.gov
- EnergySmart Schools: www.eere.energy.gov
- UC Berkeley Library: www.lib.berkeley.edu
- Energy Design Resources: www.energydesignresources.com
- Collab. for HP Schools: www.chps.net



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